



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ecliptic and thru which the Earth does not generally pass. But on the other hand it is in good accordance with the apparent disks of shooting stars when observed in the telescope. The shape and the mass of the matter in the Zodiacal Light might thus be able to produce at least some of the disturbing effects observed in the orbits of the planets. The phenomenon of the Zodiacal Light has a sufficiently diversified character to explain most of the very discordant observations but continued observations ought to be directed towards all the aspects of this—the giant and nebular phenomenon of the solar system.

H. THIELE.

Mount Hamilton, July, 1921.

RECENT OBSERVATIONS OF THE GREEN BANDS IN THE SPECTRUM
OF NOVA AQUILAE No. 3*

(Abstract)

Spectrograms of *Nova Aquilae* No. 3 have recently been secured by Dr. Lundmark and the writer for the purpose of recording the form of the green nebular bands, N_1 and N_2 . A comparison of these spectrograms with the ones obtained in 1919 and 1920 shows that conspicuous changes in the distribution of the light in the bands have occurred in the interval of two years. Since 1919 the extreme violet and red maxima have increased in intensity with corresponding decrease in intensity of the central maxima.

The bands still show the peculiar sinuous appearance when the slit of the spectrograph is placed along the diameter of the nova disk in position angle 202° , and the symmetrical form for the slit in position angle 112° .

The extreme violet and red maxima, which, on the spectrograms of 1919 and 1920, were displaced 29 angstroms from the normal positions of the nebular lines, now show a smaller displacement by about 1.3 angstroms.

On the spectrogram of June, 1921, the N_1 and N_2 bands correspond to an image disk of $5''.0$ in diameter.

A comparison of the observed diameters of the nova disk in 1918 to 1921 indicates that the green disk is expanding at a continually decreasing rate.

Difficulties in the interpretation of the displacements of the maxima in the bands as due to the radial velocity of an expanding

mass of gas, to which the author has previously called attention, appear to be increased by these additional facts of observation.

J. H. MOORE.

NOTE ON THE NEBULAR DISK OF NOVA AQUILAE No. 3

Nova Aquilae, No. 3 was examined with the 36-inch telescope on the nights of June 4th, June 8th and July 7th. It was noted on the first night that the blue-green nebulous envelop or halo which was so conspicuous in 1920 had become very much fainter and apparently larger, but the seeing on this night and on June 8th was not good enough to permit accurate measures. On July 7th the observing conditions were very good and, the nebulous envelop, tho faint, was well defined (at the focus for the nebulum lines 8^{mm} outside of the normal stellar focus) and much larger than the out-of-focus star image. The diameters, north-south and east-west, were measured, the results being, respectively, 5".07 and 4".98. The disk appeared to be perfectly round and the star to be placed centrally within it.

ROBERT G. AITKEN.

THE APPARENT DISTRIBUTION OF THE NOVAE

It is well-known that the novae are concentrated toward the belt of the Milky Way, and it has sometimes been thought that the probability for the outburst of a nova in any given part of the sky is proportional to the star density in that area. If this were true we should expect to find novae more frequently in the bright star clouds of the Milky Way than elsewhere.

The galactic distribution of 45 objects considered to be *bona fide* galactic novae (the novae in spiral nebulae and in globular clusters are excluded) shows that this supposed law does not hold. Plots made on the basis of Pickering's diagram of the 18 hour region of the galaxy and Graff's curves for equal light intensity for the 6 hour region show that novae are not situated in the brightest regions of the Milky Way. They prefer places where the light intensity is low, as at the borders of the galaxy or of the so-called "coal-sacks." From Nort's diagram¹ of the light intensity and star density in the Milky Way it would seem that novae occur rather in the regions of low light intensity than in those where the star density is small.

¹*Recherches astronomiques de l'observatoire d'Utrecht VII.*